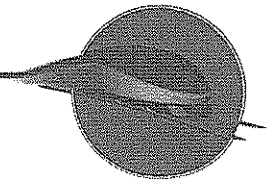
Project Name: CT-NHHS Corridor-1a *Date of Submission:* 08/24/09 *Version Number:* 1.0

High-Speed Intercity Passenger Rail (HSIPR) Program



Application Form

Track 1a–Final Design (FD)/Construction & Track 4–FY 2009 Appropriations Projects

Welcome to the Track 1a Final Design (FD)/Construction and Track 4 Application for the Federal Railroad Administration's High-Speed Intercity Passenger Rail (HSIPR) Program. Applicants for Track 1a FD/Construction and/or Track 4 are required to submit this Application Form and Supporting Materials (forms and documents) as outlined in Section G of this application and in the HSIPR Guidance.

We appreciate your interest in the program and look forward to reviewing your application. If you have questions about the HSIPR program or this application, please contact us at HSIPR@dot.gov.

Instructions:

- Please complete the HSIPR Application electronically. See Section G for a complete list of the required application materials.
- In the space provided at the top of each section, please indicate the project name, date of submission (mm/dd/yy) and the application version number. The distinct Track 1a and/or Track 4 project name should be less than 40 characters and follow the following format: State abbreviation-route or corridor name-project title (e.g., HI-Fast Corridor-Track Work IV).
- For each question, enter the appropriate information in the designated gray box. If a question is not applicable to your FD/Construction Project, please indicate "N/A."
- Narrative questions should be answered concisely within the limitations indicated.
- Applicants must upload this completed application and all other application materials to www.GrantSolutions.gov by August 24, 2009 at 11:59pm EDT.
- Fiscal Year (FY) refers to the Federal Government's fiscal year (Oct. 1- Sept. 30).
- Please direct questions to: HSIPR@dot.gov

A. Point of Contact and Applicant Information

(1) Application Point of Contact (POC) Name: **James Redeker**		**POC Title:** **Bureau Chief, Public Transportation**		
Street Address: 2800 Berlin Turnpike	**City:** **Newington**	**State:** **CT**	**Zip Code:** **06410**	**Telephone Number:** **860-594-2802**
Fax: 860-594-3406		**Email: james.redeker@ct.gov**		

(2) Name of lead State or organization applying *(only States may apply for Track 4)*: Connecticut Department of Transportation

(3) Name(s) of additional States and/or organizations applying in this group *(if applicable)*: Amtrak

(4) Is this project for which you are applying for HSIPR funding related or linked to additional applications for HSIPR funding that may be submitted in this or subsequent rounds of funding? ☒ Yes ☐ No ☐ Maybe

If "yes" or "maybe," provide the following information:

Program/Project Name	Lead Applicant	Track	Total HSIPR Funding Proposed *(if known)*	Status of Application
CT-NHHS Corridor-1b	State of CT	Track 1b - PE/NEPA	$9.3 million	Applied
		Track 1a - FD/Construction	$	Applied
		Track 1a - FD/Construction	$	Applied
		Track 1a - FD/Construction	$	Applied
		Track 1a - FD/Construction	$	Applied
		Track 1a - FD/Construction	$	Applied
		Track 1a - FD/Construction	$	Applied
		Track 1a - FD/Construction	$	Applied

Project Name: CT-NHHS Corridor-1a *Date of Submission:* 08/24/09 *Version Number:* 1.0

B. Project Overview

(1) FD/Construction Project Name: CT-NHHS Corridor-1a

(2) Indicate the Track under which you are applying: Track 1a - FD/Construction
Please note if you are applying for Track 1a–FD/Construction and Track 4 concurrently, you must submit ***two separate versions*** *of this application into www.GrantSolutions.gov (one for Track 1a –FD/Construction and one for Track 4–FY 2009 Appropriations Projects).*

(3) Indicate the activity(ies) for which you are applying *(check both if applicable)*:
☒ Final Design ☒ Construction

(4) What are the anticipated start and end dates for the FD/Construction Project? *(mm/yyyy)*
Start Date: 08/2009 **End Date:** 08/2012

(5) Total Cost of the FD/Construction Project (year of expenditure (YOE) Dollars*): $ 58,725,000

Please provide proposed inflation assumptions and methodology, if applicable in the space below. *Please limit response to 1,000 characters.*

Inflation assumptions are 3.6% for construction and 2% for Professional Services. The 3.6% is based on the average growth rate for heavy construction component of the PPI (Producer Price Index) over the last 20 years as reported by the BLS. The 2% estimation for labor was based on the historical average (3.7 % annual) together with an adjustment for currently subdued labor market conditions expected to remain sluggish over the next couple of years.

Of the total cost of the FD/Construction Project, how much would come from the FRA HSIPR Program: (YOE Dollars**) $ 41,105,500

Indicate percentage of total cost to be covered by matching funds 30 %
Applications submitted under Track 4 require at least a 50 percent non-Federal match to be eligible for HSIPR funding.

* Year-of-Expenditure (YOE) dollars are inflated from the base year.
** This is the amount for which the applicant is applying.

(6) Project Overview Narrative. *Please limit response to 5,000 characters.*

Provide an overview of the main features and characteristics of the FD/Construction Project, including:

- The location of the project including name of rail line(s), State(s), and relevant jurisdiction(s) (include map if available in supporting documentation).
- Identification of service(s) that would benefit from the project, the stations that would be served, and the State(s) where the service operates.
- How the project was identified through a planning process and how the project is consistent with an overall plan for developing High-Speed Rail/Intercity Passenger Rail service.
- How the project will fulfill a specific purpose and need in a cost-effective manner.
- The project's independent utility.
- The specific improvements contemplated.
- Any use of railroad assets or rights-of-way, and potential use of public lands and property.
- Other rail services, such as commuter rail and freight rail that will make use of, or otherwise be affected by, the project.

The NHHS Corridor is located on the Springfield Line running between Springfield, MA and New Haven, CT where it connects to Amtrak's NEC service. The NHHS Corridor is designated as a HSR corridor and a STRACNET route. Because

about 60% of the Springfield Line is single track, the freight and passenger service must be closely coordinated. Congestion related delays reduce operational efficiency and on time performance for both freight and Amtrak inter-city service.

The NHHS Corridor Project is one of three separate projects, each with independent utility, to improve train operations in preparation for HSR. The NHHS Corridor Project consists of the following main components:

- Installation of new track from MP 20.6 to 31.1 adjacent to the existing track.
- Realignment and rehabilitation of approximately one mile of existing track
- Reconnection of existing freight siding turnouts to the new main track
- Installation of new cab-signal and communications system equipment to accommodate the new track and support signal system changes in the existing track
- Improvements and modifications to grade crossing warning devices
- Rehabilitation and minor improvements to eleven (11) bridges and culverts
- Retirement of the existing Interlockings at Quarry (MP 20.6) and New (MP 31.1)
- Modifications to Amtrak's Boston CETC facility to reflect the addition of new double track, retirement of the two Interlockings and other systems improvements.

The project area is a segment of Amtrak owned corridor in the towns of Meriden, Berlin and Newington, CT. It is a "ready to go" project that will provide congestion relief on this route and involves the construction of about 10.5 miles of additional track in a segment of the Corridor that is now single track. Providing additional double track in the segment of the corridor, from MP20.6 to MP 30.1, will create a long segment of double track of about 17 miles, increasing much needed track capacity.

The potential for conflict between the freight and passenger service in the project area impacts the ability of freight operators to provide delivery services to local industry. The purpose of the project is to provide an effective passing track in order to relieve congestion and, therefore, improve the efficiency of both intercity passenger and freight operations. This will allow for growth in both freight and passenger volumes, avoid delay to passenger service, and add to the overall economic vitality of the region.

Improvements the Corridor from Springfield to New Haven and connecting to New York and Boston via the NEC have been recognized as a key component in meeting the goals of improving and sustaining the regional economic viability and improving regional livability in the Capitol Region Council of Government's (CRCOG) Regional Transit Strategy (RTS). This was further recognized by the Connecticut Transportation Strategy Board as an important first step in implementing a statewide strategic plan. Additionally, improvements in on-time performance and operational efficiency which will increase ridership, reduce highway traffic congestion, reduce carbon emissions and improve air quality.

The NHHS Corridor project is a joint project between the CTDOT and Amtrak, to initiate improvements that would ultimately allow for high speed rail (HSR) service along the Springfield-New Haven Line (the Line). The HSR service would be operated by Amtrak and could ultimately consist of fully electrified HSR service from Springfield, MA to New York City (NYC).

Amtrak's current regional service in the corridor operates six trains each way per weekday each day. In addition to Amtrak, there are four freight operators that use the Springfield Line. These operators serve to make deliveries between various yards and local industry. The efficient transportation of product is vital to the economic well being of the local industry as well as the operators.

(7) Status of Activities: Are any FD or Construction activities that are part of this planned investment underway or completed?

☐Yes (Final Design) ☐Yes (Construction) ☒No

If "Yes," please describe the activities that are underway or completed in the table below.[1] *If more than three activities, please detail in Section F of this application.*

Activity	Description	Completed? (If yes, check box)	Actual Initiation Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
		☐		
		☐		
		☐		

(8) Describe the project service objectives *(check all that apply):*

☐ Additional Service Frequencies
☒ Improved Service Quality
☒ Improved On-Time Performance on Existing Route
☒ Increased Average Speeds/Shorter Trip Times
☐ Other *(Please Describe):*

(9) Types of capital investments contemplated *(check all that apply):*

☒ Structures (bridges, tunnels, etc.)
☒ Track Rehabilitation
☐ New or restored sidings/passing tracks
☒ Major Interlockings
☐ Station(s)
☒ Communication, Signaling and Control
☐ Rolling Stock Refurbishments
☐ Rolling Stock Acquisition
☐ Support Facilities (Yards, Shops, Admin. Buildings)
☒ Grade Crossing Improvements
☐ Electric Traction
☐ Other *(Please Describe)*:

(10) Right-of-Way-Ownership. Provide information for all railroad right-of-way owners in the FD/Construction Project area. Where railroads currently share ownership, identify the primary owner. *If more than three owners, please detail in Section F of this application.*

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of Agreements to Implement Projects
Amtrak	Amtrak	All	All	Preliminary Executed Agreem
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place

[1] Please note: (a) requests for reimbursement of costs incurred prior to enactment of the relevant appropriations will not be considered and (b) supporting documentation for activities may also be required as noted in Appendix 2 of the HSIPR Guidance.

(11) Services. Provide information for all existing rail services within project boundaries (freight, commuter, and intercity passenger). *If more than three services, please detail in Section F of this application.*

Type of Service	Name of Operator	Top Speed Within Project Boundaries		Number of Route-Miles Within Project Boundaries	Average Number of Daily One-Way Train Operations[2] within Project Boundaries	Notes
		Passenger	Freight			
Intercity Pa	Amtrak	79		10.5	12	
Freight	CSX		50	10.5	10	
Freight	PNW		50	10.5	4	

(12) Rolling Stock Type. Describe the fleet of locomotives, cars, self-powered cars, and/or trainsets that would be intended to provide the service upon completion of the project. *Please limit response to 1,000 characters.*

Existing Amtrak equipment currently providing intercity service will be used

(13) Intercity Passenger Rail Operator. Provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) upon completion of the planned investment (e.g., Amtrak).
Name of Operating Partner: Amtrak
Status of Agreement: No operating partner involved

(14) Benefits to Other Types of Rail Service(s). Are benefits to non-intercity-passenger rail services (e.g., commuter, freight) foreseen?
☒ Yes ☐ No
If "Yes", provide further details in Section E, Question 2.

[2] One daily round-trip train operation should be counted as two daily one-way train operations.

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C. Eligibility Information

(1) Select applicant type, as defined in Appendix 1.1 of the HSIPR Guidance *(only States may apply for Track 4)*:

☒ State
☐ Amtrak

If one of the following, please append appropriate documentation as described in Section 4.3.1 of the HSIPR Guidance:

☐ Group of States
☐ Interstate Compact
☐ Public Agency established by one or more States
☒ Amtrak in cooperation with a State or States

(2) Establish Completion of Preliminary Engineering. In the space(s) below, please list the documents that establish completion of Preliminary Engineering for the project covered by this application. See HSIPR Guidance Appendix 2.2. If more than four references need to be listed, please place the additional information in Question F.

Document Name	Completion Date (mm/yyyy)
PE Plans completed	08/2009
Detailed Cost Estimates Completed	08/2009
Project Management Plan	08/2009
Categorical Exclusion Document ready for submission to FRA	TBD

(3) Establish Completion of NEPA Documentation (the date document was issued and how documentation can be verified by FRA). The following are approved methods of NEPA verification (in order of FRA preference): 1) References to large EISs and EAs that FRA has previously issued, 2) Web link if NEPA document is posted to a website (including www.fra.gov), 3) Electronic copy of non-FRA documents attached with supporting documentation, or 4) a hard copy of non-FRA documents (large documents should not be scanned but should be submitted to FRA via an express delivery service). See HSIPR Guidance Section 1.6 and Appendix 3.2.9.

Documentation	Date *(mm/yyyy)*	Describe How Documentation Can be Verified
☒ Categorical Exclusion Documentation		Submission to FRA pending, draft attached as supporting documentation
☐ Final Environmental Assessment		
☐ Final Environmental Impact Statement		

(4) Indicate if there is an environmental decision from FRA (date document was issued and web hyperlink if available).

Documentation	Date *(mm/yyyy)*	Hyperlink *(if available)*
☐ Categorical Exclusion Determination		
☐ Finding of No Significant Impact		
☐ Record of Decision		

D. Public Return on Investment

(1) 1A. Transportation Benefits. *See HSIPR Guidance Section 5.1.1.1. Please limit response to 8,000 characters:*

How is the project anticipated to improve Intercity Passenger Rail (IPR) service? Describe the overall transportation benefits, including information on the following *(please provide a level of detail appropriate to the type of investment):*

- IPR network development: Describe improvements to intermodal connections and access to stations as well as actual and potential expansions to the IPR network that may result from the project (including opportunities for interoperability with other services).
- IPR service performance improvements *(also provide specific metrics in table 1B below)*: Please describe service performance improvements directly related to the project, as well as a comparison with the existing service (*without project*). Describe relevant reliability improvements (e.g., increases in on-time performance, reduction in operating delays), reduced schedule trip times, increases in frequencies, aggregate travel time savings (resulting from reductions to both schedule time and delays, expressed in passenger-minutes), and other relevant performance improvements.
- IPR service results *(also provide specific metrics in table 1B below)*: Describe relevant outcomes of the service improvement such as increases in ridership, passenger-miles, and other results in comparison with the existing service (*without project*).
- Suggested supplementary information (*only when applicable*):
  - Transportation Safety: Describe overall safety improvements that are anticipated to result from the FD/Construction Project, including railroad and highway-rail grade crossing safety benefits, and benefits resulting from the shifting of travel from other modes to safer IPR service.
  - Cross-modal benefits from the FD/Construction Project, including benefits to:
    - ✓ Commuter Rail Services – Service improvements and results (applying the same approach as for IPR above).
    - ✓ Freight Rail Services – Service performance improvements (e.g., increases in reliability and capacity), results (e.g. increases in ton-miles or car-miles of the benefiting freight services), and/or other congestion, capacity or safety benefits.
    - ✓ Congestion Reduction/Alleviation in Other Modes; Delay or Avoidance of Planned Investments – Aviation and highway congestion reduction/alleviation, and/or other capacity or safety benefits. Describe any planned investments in other modes of transportation that may be avoided or delayed due to the improvement to IPR service that will result from the project.

The improvements proposed for funding under the FRA's HSIPR progran will enhance innercity rail service, improve freight operations and promote the development of future commuter rail service by adding track capacity in a critical section of the NHHS Corridor. This additional track will reduce the potential for delays and improve travel time for all current users of the corridor. The termnii of the NHHS Corridor--New Haven, Ct and Springfield, MA-- create the opportunity to extend service to New York City and Boston. Improving travel times, convenience and reliability to stations in the corridor will provide a viable alternative to automobile travel and increase rail ridership. Intermodal connections are available to passengers at New Haven, Hartford and Springfield.

Improvements to the NHHS Corridor will provide a safer mode of travel in comparison to auto travel where there is a higher frequency of accidents. Improved railroad and highway grade crossings with advanced traffic control and pre-emption systems would create a safer environment for passengers traveling on the intercity rail service, as well as for motorists on the roadways. Safety issues will be addressed with a "double" track by creating opportunities for movement around slow or disabled trains, as well as separating tracks for freight and intercity passenger rail service.

Provision of interlocking mechanism due to a "double" track at the Berlin Station would provide operational flexibility for freight rail service. This would enable the dispatcher to move tracks quickly to shift the freight service thereby reducing passenger delays on the intercity rail service. The amount of passenger delay could be reduced by as much as 90 percent.

Intercity passenger rail reliability will be improved by the addition of a "double" track on the 10.5 mile segment. This would enable a shift from auto mode to intercity rail service and therefore an increase in ridership and revenue. This reduces congestion on major highways by reduced vehicle miles traveled (VMT) and vehicle hours traveled (VHT), resulting in reduced carbon emissions and improved air quality.

1B. Operational and Ridership Benefits Metrics: In the table(s) below, provide information on the anticipated transportation benefits and ridership changes projected to result from the project. Please do not include benefits and changes that would occur even if the project is not implemented (for example, as a result of population or economic growth factors).

Project/Program Metric	Actual— FY 2008 levels	Projected Totals by Year (Actual Levels Plus Project-Caused Changes Only)		"X" If N/A or Unsure
		First Full Year After Project Completion	Fifth Full Year After Project Completion	
Annual passenger-trips				☒
Annual passenger-miles (millions)	29.110			☒
Annual IPR seat-miles offered (millions)	77.956	77.956		☐
Average number of daily round train trip operations (typical weekday)	6	6		☐
On-time performance (OTP)[3] – percent of trains on time at endpoint terminals	79%			☒
Average train operating delays: minutes of en-route delays per 10,000 train-miles[4]				☒
Top operating speed (mph)	79	79		☐
Average scheduled operating speed (mph) (between endpoint terminals)	37			☒

(2) 2A. Economic Recovery Benefits. *This section is required for Track 1a, and optional for Track 4. Please limit response to 4,000 characters. For more information, see Section 5.1.1.2 of the HSIPR Guidance.*

Describe the contribution the FD/Construction Project is intended to make towards economic recovery and reinvestment, including information on the following:

- How the project will result in the creation and preservation of jobs, including number of onsite and other direct jobs (on a 2,080 work-hour per year, full-time equivalent basis), and timeline for achieving the anticipated job creation.
- How the different phases of the project will affect job creation (consider the construction period vs. operating period)

[3] As calculated and reported by Amtrak according to its existing procedures and definitions. An example can be found at page E-7 of the May 2009 Monthly Performance Report at http://www.amtrak.com/pdf/0905monthly.pdf. 'On-time' is defined as within the distance-based thresholds originally issued by the Interstate Commerce Commission, which are: 0 to 250 miles and all Acela trains—10 minutes; 251 to 350 miles—15 minutes; 351 to 450 miles—20 minutes; 451 to 550 miles—25 minutes; and 551 or more miles—30 minutes.

[4] As calculated by Amtrak according to its existing procedures and definitions. Useful background can be found at pages E-1 through E-6 of Amtrak's May, 2009 Monthly Performance Report at http://www.amtrak.com/pdf/0905monthly.pdf

- How the project will create or preserve jobs or new or expanded business opportunities for populations in Economically Distressed Areas (consider the construction period vs. operating period)
- How the project will result in increases in efficiency by promoting technological advances.
- How the project represents an investment that will generate long-term economic benefits (including the timeline for achieving economic benefits and describe how the project was identified as a solution to a wider economic challenge)
- If applicable, how the project will help to avoid reductions in State-provided essential services.

The following table presents the expenditure-based employment (direct and total) impacts pertaining to the final design and construction phases associated with the 1a application-related corridor improvements in the study area. Overall, employment impacts are estimated to amount to 410 job-years over the 4-year time horizon, ranging from 7 in year 2009 to 198 direct jobs in year 2011, or 919 total job-years over the 4-year time horizon, ranging between 17 in year 2009 to 443 total jobs in year 2011. Please note that because there are no envisioned changes in service and consequently O & M costs, there are no operations-related job impacts.

Employment (Job-Years)

	2009	2010	2011	2012	Total Horizon Job Years
Construction					
Direct	0	41	164	123	328
Total	0	89	356	267	712
Prelim. Engineering Services (FD)					
Direct	7	10	34	31	81
Total	17	26	87	78	207
FD/Construction					
Direct	7	51	198	154	410
Total	17	115	443	345	919

*notes: total = direct + indirect + induced
impacts are specific to the three-county corridor region

Investment in the NHHS Corridor will improve the reliability and viability of current intercity passenger service and provide a sound foundation for the eventual electrification and creation of high speed rail service between New Haven and Springfield. The long term benefits also include establishing an infrastructure base for a new commuter service and improving freight operations.

The project will reduce congestion on the line, improving the ability of freight operators to service their customers. Current freight operations are delayed for substantial periods of time creating inefficiencies in the delivery of materials to manufacturers and other employers along the line. Increassed efficiency and reliability of service will help to ensure a sufficient supply of materials to businesses, preserving and protecting jobs.

2B. Job Creation: Provide the following information about job creation through the life of the FD/Construction Project. Please consider construction, maintenance, and operations jobs.

	FD/ Construction Period	First full Year of Operations	Fifth full Year of Operations
Anticipated number of annual onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis)	410 direct job years over 4 years	NA	NA

(3) Environmental Benefits. *Please limit response to 4,000 characters.*

How will the FD/Construction project improve environmental quality, energy efficiency, and reduction in the Nation's dependence on oil? Address project-caused changes in the following:

- Any projected reductions in key emissions (CO2, O^3, CO, PMx, and NOx) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing service for the first and fifth years of full operation *(provide supporting documentation if available).*
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing service for the first and fifth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, "Leadership in Environmental and Energy Design" building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

Reduction in fossil fuel use and the associated reduction in greenhouse gas and other emissions are significant benefits of rail travel. This is due to the energy efficiency of rail versus other modes. Based on data for btu's per passenger mile of travel for various modes published by US DOE, the change in energy use was calculated for trips diverted from automobile to rail. Again using DOE data, energy changes were then converted to fossil fuel use equivalents. For every 1,000,000 passenger miles of travel that is converted from automobile to rail, equivalent to about 33,000 passengers traveling the proposed improvement, fossil fuel use is reduced by 7,500 gallons and carbon emissions are reduced by 66 metric tons. Of course, in addition to these reductions, significant additional benefits are realized from the reduction in other harmful emissions associated with fossil fuel use.

(4) Livable Communities Project Benefits Narrative. (*For more information, see Section 5.1.1.3 of the HSIPR Guidance, Livable Communities). Please limit response to 3,000 characters.*

How will the FD/Construction Project foster Livable Communities? Address the following:

- Integration with existing high density, livable development: Provide specific examples, such as (a) central business districts with walking/biking and (b) public transportation distribution networks with transit-oriented development.
- Development of intermodal stations: Describe such features as direct transfers to other modes (both intercity passenger transport and local transit).

The higher density communities on the NHHS Corridor are Springfield, MA, Hartford, CT, Meriden, CT and New Haven, CT, all of which would be served by any intercity passenger rail service. All of cities have initiated transit oriented development (TOD) programs in their respective communities. These projects are consistent with the livable communities goal of providing a mix of housing, retail and employment with access to multiple transportation options other than single occupant automobiles. Once completed, the NHHS Corridor Project will result in improved on time preformance and reliability and make intercity rail travel an attractive option to travel by automobile. The proposed improvements to the NHHS Corridor will help support community TOD intitatives and contribute to the economic revitalization efforts now taking place in Springfield, Meriden, Hartford and New Haven.

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E. Project Success Factors

(1) Project Management Approach and Applicant Qualifications Narrative: *Please provide separate responses to each of the following. Additional information on project management is provided in Section 5.1.2.1 of the HSIPR Guidance, Project Management.*

1A. Applicant qualifications. *Please limit response to 2,000 characters.*
Management experience: Does the applicant have experience in managing rail investment projects and managing projects of a similar size and scope to the one proposed in this application?

- ☒ Yes - Briefly describe experience (brief project(s) overview, dates)
- ☐ No- Briefly describe expected plan to build technical and managerial capacity; provide reference to Project Management Plan.

The Connecticut Department of Transportation (Department) has a long and successful track record in planning, design and construction of transportation infrastructure, spanning a period of over 40 years. The Department is truly an intermodal agency which owns, maintains and operates state passenger railroads, highways and bridges, bus transit operations and facilities, airport operations and facilities, a deep water port, and two ferry boats. Within these modes, the Department has a strong history of managing major transportation projects, including those for railroad transport. Such projects include the New Haven Line Peck Bridge replacement in Bridgeport, the New Haven Line centenary replacement, the New Haven Line tie replacement, rehabilitation and expansion of the New Haven Rail maintenance facility, and major railcar replacements

1B. Describe the organizational approach for the different project stages included in this application (final design, construction), including the roles of staff, contractors and project stakeholders in implementing the project. For construction activities, provide relevant information on work forces, including railroad contractors and grantee contractors. *Please limit response to 2,000 characters.*

The final design and construction of this project will be a collaberative process between the Connecticut Department of Transportion and its Amtrak partner. Amrtak will provide both design services and construction sevices for the project though existing forces and/or consultant services.

1C. Does the FD/Construction Project require approval by FRA of a waiver petition from a Federal railroad safety regulation? (Reference to, or discussion of, potential waiver petitions will not affect FRA's handling or disposition of such waiver petitions.)

- ☐ YES- If yes, explain and provide a timeline for obtaining the waivers
- ☒ NO

Please limit response to 1,500 characters.

1D. Provide a preliminary self-assessment of project uncertainties and mitigation strategies (consider funding risk, schedule and budget risk and stakeholder risk). Describe any areas in which the applicant could use technical assistance, best practices, advice or support from others, including FRA. *Please limit response to 2,000 characters.*

The nature of this project, the re-establishing of a second track where one previously existed but was revoved presents minimun risk or uncertaintly. The partnership of Amtrak and the Connecticut Department of Transportation will employ strong project oversight to minimize any schedule slippage or budget overruns. As the applicant for the HSIPR funds the Connecticut Department of Transportation will assume responsibility for justifiable cost over-runs. The Department has, thought the State's deadicated Special Transportation Fund, the ablitiy to cover such occurances

(2) Stakeholder Agreements Narratives. *Additional information on Stakeholder Agreements is provided in Section 5.1.2.2 of the HSIPR Guidance.*

Under each of the following categories, describe the applicant's progress in developing requisite agreements with key

stakeholders. In addition to describing the current status of any such agreements, address the applicant's experience in framing and implementing similar agreements, as well as the specific topics pertaining to each category.

2A. Ownership Agreements – Describe how agreements will be finalized with railroad infrastructure owners listed in the "Right-of-Way Ownership" and "Service Description" tables in Section B. If appropriate, "owner(s)" may also include operator(s) under trackage rights or lease agreements. Describe how the parties will agree on project design and scope, project benefits, project implementation, use of project property, project maintenance, scheduling, dispatching and operating slots, project ownership and disposition, statutory conditions and other essential topics. Summarize the status and substance of any ongoing or completed agreements. *Please limit response to 2,000 characters.*

Amrtak is both the current owner and operator of the existing intercity service on this line. The addition of a second track in this congested section of the corridor will enable the expansion of intercity service in the future while also better service opportunities to current and future freight railrads operations. This improvement for intercity service will also provide additional capacity for future HSR activites. With Amtrak participation, the Department of Transportation will engage all parties to ensure by-in for the impementation and construction of the project.

2B. Operating Agreements – Describe the status and contents of agreements with the intended operator(s) listed in "Services" table in the Project Overview section above. Address project benefits, operation and financial conditions, statutory conditions, and other relevant topics. *Please limit response to 2,000 characters.*

As a result of this project, the owner of the railline, Amtrak, will able to expand its intercity service. Amtrak will maintain and/or revise its agreements with all other operators on the line who will benefit by this improvement.

2C. Selection of Operator – This question applies to Track 1a only. If the proposed operator railroad was not selected competitively, please provide a justification for its selection, including why the selected operator is most qualified, taking into account cost and other quantitative and qualitative factors, and why the selection of the proposed operator will not needlessly increase the cost of the project or of the operations that it enables or improves. *Please limit response to 1,000 characters.*

Amtrak is the current owner and operator on the line, no change in this is anticpated.

2D. Other Stakeholder Agreements – Provide relevant information on other stakeholder agreements including State and local governments. *Please limit response to 2,000 characters.*

The principal stakeholders for this line include Amtrak, freight railroads, intercity travellers for Connecticut, Massachusetts, and Vermont, as well as the municapalities and Connecticut citizens and businesses along the line. The principal stakeholder agreement will be between the CTDOT and Amtrak, which has been drafted.

2E. Agreements with operators of other types of rail service – Describe any cost sharing agreements with operators of non-intercity passenger rail service (e.g., commuter, freight). *Please limit response to 2,000 characters.*

There are no cost sharing agreements with freight rail operators.

(3) Financial Information.

3A. Capital Funding Sources. Please provide the following information about your funding sources (if applicable).

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding[5]	Type of Funds	Dollar Amount (YOE Dollars)	% of Project Cost	Describe Uploaded Supporting Documentation to Help FRA Verify Funding Source
State of CT	New	Planned		$17.620,000	30	Not Available
	New	Committed				
	New	Committed				

3B. Capital Investment Financial Agreements: Describe any cost sharing contribution the applicant intends to make towards the FD/Construction Project, including its source, level of commitment, and agreement to cover cost increases or financial shortfalls. Describe the status and nature of any agreements between funding stakeholders that would provide for the applicant's proposed match, including the responsibilities and guarantees undertaken by the parties. Provide a brief description of any in-kind matches that are expected. *Please limit response to 2,000 characters.*

The State of Connecticut has agreed to commit 30% of the project costs.

3C. Operating Financial Plan: Does the applicant expect that the State operating subsidy requirements for the benefiting intercity passenger rail service will significantly increase, **as a result of the project**, during the first five years after project completion? ☐ Yes ☒ No

If "Yes," please complete the table below (in YOE dollars) and answer the following questions. *Please limit response to 2,000 characters.*

(a) How did you project future State operating subsidies for the benefiting service(s); and

(b) What are the source, nature, and likelihood of the funding that will enable the State to finance the projected increases in annual operating subsidies due to the project?

[5] Reference Notes: The following categories and definitions are applied to funding sources:
Committed: Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed project/program without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed project/program, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project/program.
Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed project but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the project sponsor's control (e.g., the project development schedule extends beyond the State Rail Program period).
Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency's CIP.

Subsidy	Actual— FY 2009 levels (YOE Dollars)	Projected Totals by Year (Actual Levels Plus Project Caused Changes Only) (YOE Dollars)	
		First Full Year After Project Completion	Fifth Full Year After Project Completion
State operating subsidy (total for all benefiting services)			

(4) Financial Management Capacity and Capability – Provide audit results and describe applicant capability to absorb potential cost overruns, financial shortfalls, or financial responsibility for potential disposition requirements (include as supporting documentation as needed). Provide statutory references/ legal authority to build and oversee a rail capital investment. *Please limit response to 2,000 characters.*

The Connecticut Department of Transportation will assume responsibility for justifiable cost over-runs. The Department has, though the State's deadicated Special Transportation Fund has the ablitiy to cover such occurances and has a long tack record of doing so. This Transportation Fund is composed of dedicated revenue from the states gasoline, other fuel taxes, registration fees and other vehicle associated taxes and fees. The Commissioner of Transportation has the statutory authority to contract, build and oversee such capital investments. The powers, duties, and responsibilities of the commissioner are principally found in Connecticut General Statues 13b-1 through 13b-57 .

(5) Timeliness of Project Completion – Provide the following information on the dates and duration of key activities, if applicable. *For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of Project Completion.*

Final Design Duration:	8 months
Construction Duration:	24 months
Rolling Stock Acquisition Duration:	NA months
Rolling Stock Testing Duration:	NA months
Service Operations Start date:	NA *(mm/yyyy)*

(6) If applicable, describe how the project will promote domestic manufacturing, supply and other industries, including United States-based equipment manufacturing and supply industries. *Please limit response to 1,500 characters.*

Several manufacturing businesses are supplied by one or more of the four freight operators using the NHHS Corridor. With 60% of the corridor single track, delays in service and long layover times occur. The Connecticut State Rail Plan predicts a steady 3% annual growth in freight volume. The improvements proposed by this project will fully support the implementation of the State Rail Plan. It will encourage manufacturing and other economic growth by alleviating congestion and improving on time service deliveries along the corridor.

(7) If applicable, describe how the project will help develop US professional railroad engineering, operating, planning and management capacity needed for sustainable HSR/IPR development in the United States, including promotion of a diverse workforce. *Please limit response to 1,500 characters.*

The Track 1A Project require specialized railroad skills for planning, design, installation, testing, operations, and management. Many of the jobs created or supported for this work fall into the very specialized railroad engineering disciplines, such as track, communications & signal / train control, structures, and rail vehicles. In addition, the engineering, operations and project / program management oversight required for the projects will require specialized railroad on-the-job training provided by veteran Amtrak employees. The combination of railroad technical and management job opportunities will result in a significant number of trained railroad professionals available to continue in the future on similar HSR project within the US market.

Through Amtrak's Management Associate Program, Amtrak will attract and develop high potential employees among a diverse workforce by providing skills and experiences to prepare them for leadership positions, in both business and technical management within Amtrak.

Amtrak and CTDOT are equal opportunity employers dedicated to promoting a fair, equitable work environment, and committed to ensuring a workforce that embraces the value of diversity. Both agencies monitor policies to avail employment opportunities, training, benefits, and other employment related practices without regard to race, color, gender, religion, age, disability, veteran status or any other characteristic protected by Federal, State or local law.

Project Name: CT-NHHS Corridor-1a *Date of Submission:* 08/24/09 *Version Number:* 1.0

F. Additional Information

(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing (e.g., Section E, Question 1B). *This section is optional.*

Project Name: CT-NHHS Corridor-1a *Date of Submission:* 08/24/09 *Version Number:* 1.0

G. Summary of Supporting Materials

Application Form	Required	Optional	Reference	Description	Format
☐ This Application Form	✓		HSIPR Guidance Section 4.3.3.3	This document to be submitted through *GrantSolutions.*	Form
Supporting Forms	**Required**	**Optional**	**Reference**	**Description**	**Format**
☐ General Info.	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through *GrantSolutions.*	Form
☐ Detailed Capital Cost Budget	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through *GrantSolutions.*	Form
☐ Annual Capital Cost Budget	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through *GrantSolutions.*	Form
☐ Project Schedule	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through *GrantSolutions.*	Form
Supporting Documents	**Required**	**Optional**	**Reference**	**Description**	**Format**
☐ Map of the Planned Investment		✓	Application Question B.6	Map of the Planned Investment location. Please upload into *GrantSolutions.*	None
Standard Forms	**Required**	**Optional**	**Reference**	**Description**	**Format**
☐ SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Please submit through *GrantSolutions*	Form

☐ SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Please submit through *GrantSolutions*	Form
☐ SF 424D: Assurance Construction	✓		HSIPR Guidance Section 4.3.3.3	Please submit through *GrantSolutions*	Form
☐ FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	May be obtained from FRA's website at http://www.fra.dot.gov/downloads/admin/assurancesandcertifications.pdf. The document should be signed by an authorized certifying official for the applicant. Submit through *GrantSolutions.*	Form

PRA Public Protection Statement: Public reporting burden for this information collection is estimated to average 32 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0583**.